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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,955	03/15/2001	Stephen Karl Heeks	C1043/7028	5248

7590 12/06/2004  
FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.  
1300 I STREET, N.W.  
WASHINGTON, DC 20005-3315

EXAMINER	
MENGISTU, AMARE	
ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/719,955	<b>Applicant(s)</b> HEEKS ET AL.	
	<b>Examiner</b> Amare Mengistu	<b>Art Unit</b> 2673	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 is/are allowed.
- 6) ☒ Claim(s) 1-14, 26 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 5-23 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 4. See MPEP § 608.01(n). Accordingly, the claims 5-23 have not been further treated on the merits.

### *Claim Rejections - 35 USC § 112*

1. Claims 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Friend et al (6,518,700)** in view of **Huang et al (5,965,907)**.
4. As to claims 1-4 and 24, **Friend et al** (hereinafter **Friend**) discloses a display device comprising: a light switching unit comprising an array of pixel each operable to vary the transmission of light there through (col.4, lines 28-44); at least one of the linear

region of organic light emissive material being formed by a process of ink jet deposition (col.5, lines 50-64), a third series of regions of organic light emissive material having a third emission color (fig.2 (58), col.4, lines 1-9), each of the organic light emissive material having one emission color is spaced from the next such region (see, fig.2 (where (52) is spaced apart from (56)) .

**Friend** did not explicitly disclose having a backlight comprising a first series of linear regions of organic emissive material having a first emission color and a second series of linear regions of organic light emissive material having a second emission color, located behind a pixels.

The patent of **Huang et al** (hereinafter **Huang**) is cited to teach that it is well known for a backlight of organic emissive material (fig. (50)) to have first emission color (fig.2 (52); col.3, lines 53-67) and a second series of linear regions of organic light emissive material having a second emission color (fig.2 (56), col.4, lines 1-9) located behind a pixels (fig.2 (60), col.4, lines 13-26).

Therefore, it would have been obvious to one skill in the art at the time of the invention was made to have been motivated to combine a full color light emitting backlight of **Huang** into the display system of **Friend**, because this will provide a sufficiently large illumination and capable of field sequential color to achieve a full color image.

***Allowable Subject Matter***

5. Claim 25 is allowed.

6. The following is an examiner's statement of reasons for allowance: the cited prior arts (Friend & Huang) has failed to teach applicant's claimed invention "***A method for forming a light emissive unit...comprising the step of: forming a series of grooves on a substrate; depositing by means of ink-jetting in some of the grooves a first linear region of organic light emissive material having a first emission color; depositing by means of ink jetting in others of the grooves a second linear region of organic light emissive material having a second emission color, and locating the grooves such that the light emissive material in each groove line behind a respective plurality of pixels of the array in the viewing direction for backlighting pixels***".


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (703)305-4880. The examiner can normally be reached on M-F,T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (703)305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Amare Mengistu  
Primary Examiner  
Art Unit 2673

AM  
12/2/04